Project #2: Creating maps using GLOBE data

If continuing from Project #1, Part 3, the graph of Mean Air Temperature for <u>Lycee Behanzin</u>, in Benin, <u>Reynolds Jr. Sr. High School</u>, in the USA, and <u>Serpentine Primary School</u>, in Australia, along with the table of data should be on your screen. Scroll down to the bottom of the page until you see a box containing the Navigation Menu Items. Click on <u>Maps and Graphs</u> listed under <u>GLOBE Data</u>.

If you are beginning this activity and not continuing directly from Project #1, Part 3, enter the GLOBE Home Page **<www.globe.gov>**. Click on <u>Enter the GLOBE Site</u>, and then click on <u>Maps and Graphs</u> listed under <u>GLOBE Data</u> on the navigation bar on the left.

- Step 1: Click on <u>GLOBE Maps</u>. You will see an image of the Globe on the right. Notice that the dataset is for Maximum Temperature and that the date is set for today. The zoom level (identified by the small magnifying glass) is set at 1x. These are the default settings.
- Step 2: Click on Europe (or as close as possible) on the Globe on the right. You will notice that the new view of the Globe has changed. Look at the top left of the map box (left of the list of zoom levels). You will notice that the part of the Globe on the right that is currently not visible is now shadowed on the Globe to the left.
- Step 3: Scroll down below the map. You will see a box entitled: <u>Map Data and Display Selection</u>. Change the <u>Date</u> to <u>Year:</u> 2004; <u>Month:</u> 02; <u>Day:</u> 15. Click the radio button for <u>medium</u> under <u>Map size</u>. Click on <u>Redraw map</u>.
- Step 4: Click on Europe (it should be easier to identify Europe this time). Notice that the image of the Globe has changed yet again. It is now a square. Notice that the magnification level is now 4x.
- Step 5: Click on the <u>8x</u> zoom level. Notice that the map zooms in more.
- Step 6: Scroll down below the map to the box entitled: <u>Map Data and Display Selection</u>. Click the radio button for <u>Both</u> under <u>Map type</u>. Click on <u>Redraw map</u>.

Looking at the map your queries produced, do the data look reasonable?	Why or why
not?	
How might the Contours help answer this question?	

Step 7: Scroll down below the map and the box entitled: <u>Map Data and Display Selection</u>. You will see a box entitled <u>Other Options</u>. Click on <u>Select Option</u> and move the cursor so that <u>Create Scatter Plot</u> is highlighted. Click on <u>Go</u>.

This will generate an X, Y plot (or Horizontal, Vertical plot) of the data visible on the map. The X, or Horizontal, axis depicts Latitude and the Y, or Vertical, axis depicts Maximum Temperature. Do the data graphed in this manner help determine whether one or more data represent possible errors? Explain:

You are now ready to search for data from other GLOBE schools in other countries and in other investigation areas.